

REMARKS

I. STATUS OF THE CLAIMS

Various of the claims are amended herein. Support for the amendments is found, for example, in FIG. 10. See, for example, operations 222 and 224 in FIG. 10.

New claims 38-40 are added. Support for the new claims is found, for example, in FIG. 10.

In view of the above, it is respectfully submitted that claims 1-11 and 22-40 are currently pending.

II. REJECTION OF CLAIMS UNDER 35 USC 103 AS BEING UNPATENTABLE OVER WALKER IN VIEW OF HOOVER

The present invention as recited, for example, in claim 1, relates to a computer-implemented decision management process for evaluating a customer of an organization having more than one account. The process comprises (a) loading all customer and account data required for evaluating the customer and each of the accounts; and (b) evaluating the customer and each of the accounts via an iterative function which uses the loaded customer and account data.

As recited, for example, in claim 1, the evaluation evaluates **each account for a same product or service** via the iterative function **with the same strategy** and evaluates accounts for **different products or services** via the iterative function **with different strategies**.

Moreover, as recited, for example, in claim 1, the loaded customer and account data is sufficient to evaluate the customer and each of the accounts without loading additional customer or account data. **Further, as recited, for example, in claim 1, the customer and account data is loaded at a time prior to the evaluation.**

Claims 26, 28 and 29 include somewhat similar language to that described above for claim 1.

As an example, in the specific example in FIG.10 of the application, an **iterative function** (see "next iteration" in FIG. 10) is used to evaluate the customer and each of the accounts. In steps 222 and 224, the type of account is taken into consideration. For example,

it is determined what kind of product or service the account is for. In FIG. 10, **different strategies are used to evaluate credit card accounts and mortgage accounts, respectively**. Via the iterative function in FIG. 10, the process loops back so that each account of the customer is evaluated, with accounts for different products or services being evaluated with different strategies.

Therefore, in the example of FIG. 10, via the use of an iterative function, the required customer and account data is loaded, prior to doing the evaluation for the various accounts. The loaded customer and account data is sufficient to evaluate the customer and each of the accounts, without loading additional customer or account data.

Please note that claim 1 specifically recites that all customer and account data required for evaluating the customer and each of the accounts is loaded at a time prior to said evaluating.

Moreover, please note that claim 1 recites that the customer and each of the accounts is evaluated via an *iterative function* which uses the loaded customer and account data, and that the loaded customer and account data is sufficient to evaluate the customer and each of the accounts without loading additional customer or account data. See for example, page 17, line 19, through page 18, line 6, of the specification. See also FIGS. 9, 10 and 11.

Claims 26, 28 and 29 include somewhat similar recitations as those described above for claim 1.

Walker relates to processing of applications for products and services offered by a financial institution. See, for example, the Abstract, and column 5, lines 66, through column 6, line 15, of Walker. The overall processing of applications is shown in the flow chart which runs from FIGS. 40-51 of Walker.

However, Walker shows the processing of only a SINGLE application by an applicant. The process does NOT show the processing of multiple applications by the same applicant.

For example, FIGS. 40-51 of Walker show the various processes which are executed to determine if a respective application is accepted. Final processing is shown in FIG. 51. Referring to FIG. 51, after a decision on a processed application is made, customer information is updated in step 2258. Then, the processing ends in step 2260.

It is important to note that the final processing in FIG. 51 of Walker does NOT loop back to FIG. 40 to begin processing of another application of the same applicant. This is significantly different than the present invention, where a plurality of accounts of an applicant are evaluated

via an iterative function.

Therefore, Walker does not show the use of an iterative function to evaluate more than one account, as in various embodiments of the present invention.

Moreover, if some type of loop back was considered in Walker, it is unclear where such a loop back would return. For example, steps 2002 to 2006 in FIG. 40 of Walker relate to the loading of customer data. If the system of Walker would require a loop back to steps 2000 or 2002, such a loop back would be significantly different than various claimed embodiments of the present invention where all the required customer and account data for evaluating a plurality of accounts is loaded, since customer data in Walker would have to be reloaded in the system to evaluate another application. This operation in Walker would be contrary to the present invention as recited, for example, in claim 1. Please note that Walker also retrieves data in other steps, such as in steps 2092 and 2094 in FIG. 43.

Therefore, it is respectfully submitted that Walker does not disclose or suggest the use of an **iterative function** to evaluate a plurality of accounts of a customer, or the **loading of all required customer and account data** to evaluate a plurality of accounts of the customer, as in various claimed embodiments of the present invention.

* * *

In the Office Action, the Examiner asserts that Walker shows a debt payment. According to the Examiner, the debt payment might include three credit card payments handled with the same strategy, and a mortgage payment handled with a different strategy.

From a review of Walker, it appears that the Examiner is referring to the Maximum Debt Burden Offer disclosed, for example, in column 7, line 57, through column 8, line 24, of Walker. As specifically disclosed in column 8, lines 17-24, of Walker, the Maximum Debt Burden Offer refers to:

a maximum loan or line dollar amount whose associated monthly payment, when added to the monthly payment amounts for the applicant's existing debts and rent or mortgage payment, divided by the customers' monthly income, creates a debt burden ratio (such as 45%) that is specified in the product parameters. If the maximum debt burden amount is negative or not used because amount requested is less than designated parameter (e.g.,

\$2,500), the amount assigned to Maximum Debt Burden Offer will default to product minimum.

Therefore, generally, Walker simply uses the total debt payments to determine an amount that can be loaned to an applicant. Such debt payments might include, for example, credit card debt and mortgage debt.

However, this disclosure in Walker does not indicate the use of an iterative function to evaluate each account of a customer for a same product or service via the same strategy and evaluate accounts of the customer for different products or services with different strategies as recited, for example, in claim 1. For example, as indicated above, Walker shows the processing of only a SINGLE application by an applicant. The process does NOT show the processing of multiple applications by the same applicant.

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In the Office Action, the Examiner asserts that Walker shows a series of look-up tables which are iteratively used in the process of Walker. Therefore, the Examiner correlates the look-up tables of Walker to the iterative function of the claimed invention.

The look-up tables of Walker are disclosed, for example, in column 9, line 66, through column 10, line 13, of Walker. From this disclosure in Walker, it appears that the look-up tables are used simply as a relational tool to access stored data, such as in a relational database model. Such use of look-up tables is significantly different than the use of an iterative function of the claimed invention. More specifically, it is respectfully submitted that the look-up tables of Walker do not indicate the use of an iterative function to evaluate each account of a customer for a same product or service via the same strategy and evaluate accounts of the customer for different products or services with different strategies as recited, for example, in claim 1. Instead, the look-up tables of Walker simply indicate that data can be stored and accessed in a relational manner.

* * *

The above arguments were presented in the prior Amendment. In response, on page 6 of the Office Action, the Examiner asserts "The examiner and applicant seem to be at an impasse on exactly what the term 'iterative function' means".

To further clarify the operation of the iterative function, claim 1 is amended to clarify that

"said evaluating **determines which strategy of a plurality of strategies will be used to evaluate each account via the iterative function based on a type of the account**". For example, in operations 222 and 224 in FIG. 10, different strategies are used to evaluate an account based on the type of account.

More specifically, as recited, for example, in claim 1, and as shown in FIG. 10, an **iterative function** (see "next iteration" in FIG. 10) is used to evaluate the customer and each of the accounts. In steps 222 and 224, the type of account is taken into consideration. For example, it is determined what kind of product or service the account is for. In FIG. 10, **different strategies are used to evaluate credit card accounts and mortgage accounts, respectively**. Via the iterative function in FIG. 10, the process loops back so that each account of the customer is evaluated, with accounts for different products or services being evaluated with different strategies.

In accordance with the above arguments for distinguishing over Walker, it is respectfully submitted that the claim amendments made herein further define over Walker.

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New claims 38-40 are added. Support for the new claims is found, for example, in FIG. 10. It is respectfully submitted that the features recited in these claims are not shown in Walker.

* * *

Hoover describes an "object-based relational distributed database system and associated methods of operation that transforms data stored in a plurality of remote, heterogeneous user databases into a homogeneous data model." See, for example, the Abstract of Hoover.

However, in view of the comments above with respect to Walker, and the amendments made herein, it is respectfully submitted that the present invention is patentable over the combination of Walker and Hoover.

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In view of the above, it is respectfully submitted that the rejection is overcome.

III. CONCLUSION

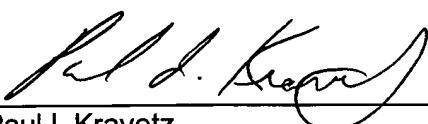
In view of the above, it is respectfully submitted that the application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

If any further fees are required in connection with the filing of this response, please charge such fees to our Deposit Account No. 19-3935.

Respectfully submitted,

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VERSION TO SHOW MARKINGS

Please AMEND the claims and ADD new claims as indicated below:

1. (CURRENTLY AMENDED) A computer-implemented decision management process for evaluating a customer of an organization having more than one account, comprising:
 - loading all customer and account data required for evaluating the customer and each of the accounts;
 - evaluating the customer and each of the accounts via an iterative function which uses the loaded customer and account data, wherein said evaluating determines which strategy of a plurality of strategies will be used to evaluate each account via the iterative function based on a type of the account, and evaluates each account for a same product or service via the iterative function with the same strategy and evaluates accounts for different products or services via the iterative function with different strategies, the loaded customer and account data being loaded at a time prior to said evaluating and being sufficient to evaluate the customer and each of the accounts by said evaluating without loading additional customer or account data; and
 - taking an action in accordance with a result of said evaluating.
2. (PREVIOUSLY AMENDED) A process as in claim 1, further comprising:
 - providing the customer data and the account data to the process for evaluation on separate extracts.
3. (PREVIOUSLY AMENDED) A process as in claim 1, further comprising:
 - providing the customer data and the account data to the process for evaluation on a plurality of extracts.
4. (ORIGINAL) A process as in claim 3, wherein different extracts are associable with different data sources.
5. (PREVIOUSLY AMENDED) A process as in claim 1, wherein at least one of the group consisting of the customer data and the account data are accessed for evaluation

via the iterative function via virtual attributes.

6. (PREVIOUSLY AMENDED) A process as in claim 1, wherein said evaluating comprises:

evaluating the customer and each of the accounts for the same product or service via an iterative decision tree having virtual attributes and which iterates through in accordance with the number of said accounts for the same product or service of the customer.

7. (PREVIOUSLY AMENDED) A process as in claim 1, wherein said evaluating comprises:

evaluating the customer and each of the accounts for the same product or service via an iterative matrix having virtual attributes and which iterates through in accordance with the number of said accounts for the same product or service of the customer.

8. (PREVIOUSLY AMENDED) A process as in claim 1, wherein said evaluating comprises:

evaluating the customer and each of the accounts for the same product or service via an iterative function having virtual attributes and which iterates through in accordance with the number of said accounts for the same product or service of the customer.

9. (PREVIOUSLY AMENDED) A process as in claim 1, wherein said evaluating comprises:

evaluating the customer and each of the accounts for the same product or service via an iterative function having both virtual attributes and non-virtual attributes and which iterates through in accordance with the number of said accounts for the same product or service of the customer.

10. (PREVIOUSLY AMENDED) A process as in claim 1, wherein said evaluating comprising:

evaluating the customer and each of the accounts for the same product or service via first and second iterative functions, each having virtual attributes and iterating through in accordance with the number of said accounts for the same product or service of the customer, wherein the first iterative function calls the second iterative function.

11. (ORIGINAL) A process as in claim 10, wherein the first iterative function is an iterative decision tree and the second iterative function is an iterative matrix.

22. (ORIGINAL) A process as in claim 8, further comprising:
storing results of iterations through the iterative function in a derived virtual attribute.

23. (CURRENTLY AMENDED) A computer-implemented decision management process for evaluating a customer of an organization having more than one account, said more than one account including accounts for different products or services, the process comprising:

providing an iterative function to evaluate the customer and each of the accounts, the iterative function having virtual attributes for accessing at least one of the group consisting of customer data and account data;

iterating through the iterative function in accordance with the number of the accounts to thereby evaluate the customer and each of the accounts, wherein the iterative function determines which strategy of a plurality of strategies will be used to evaluate each account based on a type of the account, evaluates each account for the same product or service with the same strategy, and evaluates accounts for different products or services with different strategies; and

taking an action in accordance with a result of the evaluation of the customer.

24. (ORIGINAL) A process as in claim 23, wherein the iterative function is one of the group consisting of an iterative decision tree, an iterative matrix, an iterative score model, an iterative list processor and an iterative user exit.

25. (ORIGINAL) A process as in claim 23, wherein the iterative function calls another iterative function.

26. (CURRENTLY AMENDED) An apparatus for evaluating a customer of an organization having more than one account, comprising:
a computer-implemented evaluation device which loads all customer and account

data required for evaluating the customer and each of the accounts, and evaluates the customer and each of the accounts via an iterative function which uses the loaded customer and account data, wherein the evaluation device determines which strategy of a plurality of strategies will be used to evaluate each account via the iterative function based on a type of the account, and evaluates each account for a same product or service via the iterative function with the same strategy and evaluates accounts for different products or services via the iterative function with different strategies, the loaded customer and account data being loaded at a time prior to the evaluation by the evaluation device and being sufficient to evaluate the customer and each of the accounts by the evaluation device without loading additional customer or account data; and an action taking system which takes an action in accordance with a result of the evaluation by the evaluation device.

27. (PREVIOUSLY AMENDED) An apparatus as in claim 26, wherein the iterative function has virtual attributes and iterates through in accordance with the number of said accounts .

28. (CURRENTLY AMENDED) An apparatus for evaluating a customer of an organization having more than one account, comprising:

computer-implemented evaluating means for loading all customer and account data required to evaluate the customer and each of the accounts, and for evaluating the customer and each of the accounts via an iterative function which uses the loaded customer and account data, wherein said means determines which strategy of a plurality of strategies will be used to evaluate each account via the iterative function based on a type of the account, evaluates each account for a same product or service via the iterative function with the same strategy and evaluates accounts for different products or services via the iterative function with different strategies, the loaded customer and account data being loaded at a time prior to said evaluating and being sufficient to evaluate the customer and each of the accounts by said means without loading additional customer or account data; and

means for taking action in accordance with a result of the evaluation by the evaluating means.

29. (CURRENTLY AMENDED) A computer-implemented decision management process for evaluating a customer of an organization having more than one

account for a first product or service, and more than one account for a second product or service different from said first product or service, comprising:

loading all customer and account data required for evaluating the customer and each of the accounts;

via an iterative function which uses the loaded customer and account data,
determining whether each account is for the first product or service or for the second product or service,

evaluating the customer and each of the determined accounts for the first product or service with a first strategy, and

evaluating the customer and each of the determined accounts for the second product or service with a second strategy different from the first strategy, the loaded customer and account data being loaded at a time prior to said evaluating and being sufficient to evaluate the customer and each of the accounts via the iterative function without loading additional customer or account data; and

taking an action in accordance with said evaluating the customer and each of the determined accounts for the first product or service and said evaluating the customer and each of the determined accounts for the second product or service.

30. (CURRENTLY AMENDED) A process as in claim 29, wherein said evaluating the customer and each of the determined accounts for the first product or service comprises:

evaluating the customer and each of the determined accounts for the first product or service via an iterative decision tree having virtual attributes and which iterates through in accordance with the number of accounts for the first product or service of the customer.

31. (CURRENTLY AMENDED) A process as in claim 30, wherein said evaluating the customer and each of the determined accounts for the second product or service comprises:

evaluating the customer and each of the determined accounts for the second product or service via an iterative decision tree having virtual attributes and which iterates through in accordance with the number of accounts for the second product or service of the customer.

32. (CURRENTLY AMENDED) A process as in claim 29, wherein said evaluating the customer and each of the determined accounts for the first product or service comprises:

evaluating the customer and each of the determined accounts for the first product or service via an iterative matrix having virtual attributes and which iterates through in accordance with the number of accounts for the first product or service of the customer.

33. (CURRENTLY AMENDED) A process as in claim 32, wherein said evaluating the customer and each of the determined accounts for the second product or service comprises:

evaluating the customer and each of the determined accounts for the second product or service via an iterative matrix having virtual attributes and which iterates through in accordance with the number of accounts for the second product or service of the customer.

34. (CURRENTLY AMENDED) A process as in claim 29, wherein said evaluating the customer and each of the determined accounts for the first product or service comprises:

evaluating the customer and each of the determined accounts for the first product or service via an iterative function having virtual attributes and which iterates through in accordance with the number of accounts for the first product or service of the customer.

35. (CURRENTLY AMENDED) A process as in claim 34, wherein said evaluating the customer and each of the determined accounts for the second product or service comprises:

evaluating the customer and each of the determined accounts for the second product or service via an iterative function having virtual attributes and which iterates through in accordance with the number of accounts for the second product or service of the customer.

36. (CURRENTLY AMENDED) A process as in claim 29, wherein said evaluating the customer and each of the determined accounts for the first product or service comprises:

evaluating the customer and each of the determined accounts for the first product or service via first and second iterative functions, each having virtual attributes and iterating

through in accordance with the number of accounts for the first product or service of the customer, wherein the first iterative function calls the second iterative function.

37. (CURRENTLY AMENDED) A process as in claim 36, wherein said evaluating the customer and each of the determined accounts for the second product or service comprises:

evaluating the customer and each of the determined accounts for the second product or service via first and second iterative functions, each having virtual attributes and iterating through in accordance with the number of accounts for the second product or service of the customer, wherein the first iterative function calls the second iterative function.

38. (NEW) A process as in claim 1, wherein
said evaluating produces a respective decision for each account, the respective decision being a terminal node in a decision tree, and
said taking an action executes decisions produced for accounts.

39. (NEW) A process as in claim 23, wherein
said iterating produces a respective decision for each account, the respective decision being a terminal node in a decision tree, and
said taking an action executes decisions produced for accounts.

40. (NEW) An apparatus as in claim 26, wherein
the evaluation device produces a respective decision for each account, the respective decision being a terminal node in a decision tree, and
the action taking system an action executes decisions produced for accounts.